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SUPERSONIC CRUISE RESEARCH (SCR)
PROGRAM PUBLICATIONS FOR FY 1977
THROUGH FY 1979 - PRELIMINARY
BIBLIOGRAPHY

S. HOFFMAN

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SUPERSONIC CRUISE RESEARCH (SCR)
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PRELIMINARY BIBLIOGRAPHY

FORWARD

The Supersonic Cruise Research (SCR) Program was initiated in July 1972 by the National Aeronautics and Space Administration. Originally, the program was entitled Advanced Supersonic Technology (AST); this was later changed to Supersonic Cruise Aircraft Research (SCAR); and, more recently to SCR. However, the overall objectives are essentially the same and may be summarized as follows:

- (1) To provide an expanded technology base for future civil and military supersonic aircraft
- (2) To provide the data needed to assess environmental and economic impacts on the United States of present and, in particular, future foreign supersonic transport aircraft
- (3) To define the potential benefits and trade-offs of advancements in aerodynamic efficiency structures and materials, propulsion systems, and stability and control methods applied to promising advanced supersonic cruise aircraft concepts

Integration of the technical disciplines were undertaken, analytical tools developed, and wind-tunnel, flight, and laboratory investigations were conducted in a coordinated effort to provide a sound basis for any future consideration that may be given by the United States to the development of an acceptable commercial supersonic transport.

This bibliography was prepared for the November 13-16, 1979 SCR Conference at the Langley Research Center and is a preliminary report. It covers the time period from FY 1977 through FY 1979. A previous bibliography, NASA RP-1003, covers the first five years of the program, 1972 to mid 1977. The present report also includes a few publications that were omitted in the first bibliography and several non SCR papers, which support the program, for completeness. The present document will be updated, annotated, and published as a NASA report after the conference.

The bibliography is arranged according to System Studies and the five SCR disciplines, as follows:

Propulsion
Stratospheric Emissions Impact
Materials and Structures
Aerodynamic Performance
Stability and Control

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Each discipline is subdivided into three groups:

NASA In-house Reports
NASA Contractor Reports
Articles, Meetings, and Company Reports

An index of report numbers for all the NASA in-house reports and contractor reports is given at the end of the bibliography. There are approximately 230 NASA reports and 150 articles, meetings, and company reports in this issue.

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SUPERSONIC CRUISE RESEARCH

Summary of Reports

FY 1977 to FY 1979

System Studies

<u>Report Number</u>	<u>Date</u>
NASA TM-74055	1977
78694	1978
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NASA TP-1104	1978
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145152	1977
145189	1977
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PWA	5536-8	1977
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NASA TMX-3483		1977
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NASA CR-135110		1976
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134910		1978
135189		1978
135239		1978
135362		1978
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159419		1978
159459		1978
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3168	1979
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159515	1979
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159575	1979
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MDC-J 4568	1977
PWA-5536-8	1977
GE R-78AEG 358	1978
GE R-78AEG 585	1978

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Stratospheric Emissions Impact

NASA TP-1093	1977
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2670	1977

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NASA TMX-3432	1977
NASA TM-74083	1977
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78769*	1978
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*Final report for TM-78660, 78676, and 78727, 1978

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NASA TP-1025	1977
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1300	1979
1367	1979
NASA CR -2036 3 papers	1978
2054 3 papers	1978
NASA CR-132730	1975
137720	1976
13501	1977
135191	1977
145007	1977
145235	1977
145237	1977
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145281	1978
145312	1978
145325	1978
145381-1	1978
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145382-2	1978
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158902-2	1978
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158907	1978
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3017	1978
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AFFDL-TR-78-175	1978
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AFML-IR-862-7	1979

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Aerodynamic Performance

<u>Report Number</u>	<u>Date</u>
NASA TM X-72761	1977
74021	1977
NASA TM-74043	1977
78663	1978
78683	1978
78706	1978
78726	1978
78741	1978
78750	1978
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80152	1979
NASA TN D-8380	1977
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NASA TP-1015	1977
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NASA CP-2054	7 papers 1978
NASA CR-145094	1977
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Stability and Control

<u>Report Number</u>	<u>Date</u>
NASA TP-1077	1977
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TP-proposed	1979
NASA CP-2054 4 papers	1978
NASA CR-143843	1977
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155339	1977
158965	1978
159059	1979

Also, 14 Articles, Presentations, etc.

1. Report No.	2. Government Accession No.	3. Recipient's Catalog No.	
4. Title and Subtitle Supersonic Cruise Research (SCR) Program Publications for FY 1977 Through FY 1979 - Preliminary Bibliography		5. Report Date November 1979	
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7. Author(s) S. Hoffman		8. Performing Organization Report No. P3110	
		10. Work Unit No.	
9. Performing Organization Name and Address NASA Langley Research Center Hampton, Virginia 23665		11. Contract or Grant No.	
		13. Type of Report and Period Covered Technical Memorandum	
12. Sponsoring Agency Name and Address National Aeronautics and Space Administration Washington, DC 20546		14. Sponsoring Agency Code	
15. Supplementary Notes			
16. Abstract <p>This bibliography was prepared for the November 13-16, 1979 SCR Conference at the Langley Research Center and is a preliminary report. It covers the time period from FY 1977 through FY 1979. A previous bibliography, NASA RP-1003, covers the first five years of the program, 1972 to mid 1977. The present report also includes a few publications that were omitted in the first bibliography and several non SCR papers, which support the program, for completeness. The bibliography is arranged according to System Studies and the five SCR disciplines, as follows:</p> <p style="text-align: center;"> Propulsion Stratospheric Emissions Impact Materials and Structures Aerodynamic Performance Stability and Control </p>			
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